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National Nuclear Security Administration
Nevada Site Office
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DEC 9 2003

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BECHTEL NEVADA (BN) ASSESSMENT OF PERFORMANCE MEASURES ACHIEVED AND AWARD FEE EVALUATION FOR THE PERIOD OCTOBER 1, 2002, THROUGH SEPTEMBER 30, 2003, CONTRACT NO. DE-AC08-96NV11718

The National Nuclear Security Administration Nevada Site Office (NNSA/NSO) has completed its assessment of BN effectiveness in meeting the performance expectations reflected in the Performance Evaluation Plan for the period October 1, 2002, through September 30, 2003. Based on this assessment, which has been reviewed and concurred upon by the Administrator for the National Nuclear Security Administration, BN is authorized earned fee in the amount of $23,138,904 for this period. This is a composite of $11,119,200 in earnings from the performance based incentive fee pool and $12,019,704 in earnings from the award fee pool.

Overall, BN has done an excellent job in meeting or exceeding the vast majority of NNSA/NSO programmatic, operational, and administrative expectations. BN demonstrated strong support in selection and training of its leadership; strategic planning; development of an executable five year plan; planning and execution of national security, emergency response and combating terrorism programs; site planning; nuclear operations; corporate involvement in program reviews and community outreach and support. However, NSO management specifically wants to draw BN attention to project management, scope definition in support of cost estimates, environmental management activities, and trending/preventing safety and project management issues through a strong contractor self-assessment program company wide.

NSO would like emphasize that the BN leadership team in place is proceeding in the right direction. NSO strongly believes the current BN leadership team understands and has plans to implement changes to meet and overcome the challenges that lay ahead.

A copy of the Award Fee Board Report is enclosed for your information.

Kathleen A. Carlson
Manager

OBA:WBG-04067
PNC 08-03.3

Enclosure:
As stated

FY 2003 PERFORMANCE EVALUATION REPORT (PER)
OCTOBER 1, 2002, THROUGH SEPTEMBER 30, 2003
CONTRACT NUMBER DE-AC08-96NV11718
BECHTEL NEVADA

I. EXECUTIVE SUMMARY

This Award Fee Report evaluates Bechtel Nevada (BN) performance in overall management effectiveness, timeliness, and quality of support within six Performance Objectives (POs) identified in the Fiscal Year 2003 (FY 2003) Performance Evaluation and Measurement Plan (PEMP). In addition to the Performance Objectives, BN was evaluated on overall responsiveness, senior management involvement, partnerships and teamwork in support of the National Nuclear Security Administration (NNSA) Nevada Site Office (NSO) Strategic Initiatives and site priorities.

Overall, BN performance during FY 2003 met and, in many of the POs, exceeded expectations in support of the NSO. BN demonstrated strong support in selection and training of its leadership; strategic planning; development of an executable five year plan; planning and execution of national security, emergency response and combating terrorism programs; site planning; nuclear operations; corporate involvement in program reviews and community outreach and support.

While BN exceeded expectations in the above areas, performance was less than expected in other areas. NSO management specifically wants to draw BN's attention to project management, scope definition in support of cost estimates, environmental management activities, and safety.

Furthermore, BN senior management attention is needed in trending and preventing safety and project management issues through a strong contractor self-assessment program company wide.

II. MANAGEMENT

MGT03A-01 GENERAL MANAGEMENT

Introduction

The PO for General Management is global in nature and considers all activities important to NSO senior management. Performance Targets were identified for focused evaluation. BN continued to place strong emphasis on enhancing senior management practices through strong leadership selection and training. Positive efforts were noted in business development, business management, procurement, socio-economic outreach goals, support to the National Laboratories, leadership development, and corporate support. However, attention is still warranted for BN to provide a plan to identify significant "hard dollar" cost reduction initiatives.

Business Development - Achievements

Overall, BN demonstrated exceptional responsiveness in supporting business development opportunities that could result in additional Work-for-Others (WFO) programs at the Nevada Test Site (NTS). For example, a site tour provided to a Government Printing Office (GPO) representative was very positive and may result in a substantial (approximately $100M) WFO program being sited at NTS.

BN expeditiously supported work to address NSO technology needs even with no new funding in Environmental Management (EM) technology development. BN effectively managed the small amount of funding carried over from prior years, worked collaboratively and creatively with other program offices to sponsor work of mutual interest, and brought in WFO activities to help support our EM projects.

Business Development – Areas Requiring Improvement
None reported.

Strategic Planning - Achievements
BN was instrumental in supporting the newly formed NSO Planning Board, consisting of senior members from NSO, Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory (LANL), Sandia National Laboratories (SNL), and BN. BN led the Board to work NTS Defense Programs budget issues for the Future Years National Security Plan (FYNSP). The Board successfully reduced the FYNSP deficit more than $300M to approximately $184M for the five year period from FY 2004 – FY 2008. This was accomplished by redefining BN scope, and re-baselining projects.

BN did an outstanding job producing strategic plans. Their work in developing the strategic plan for the National Center for Combating Terrorism (NCCT) was well done and has provided direction for this program. BN provided a strategic plan to the Office of Emergency Operations (NA-40) for its national emergency response assets with little prior notice. The plan was accepted in full by NA-40 and was delivered ahead of schedule, exceeding expectations.

Strategic Planning - Areas Requiring Improvement
None reported.

Enhance Working Relationships - Achievements
BN worked extensively on enhancing customer relationships and interfaces throughout NSO and NNSA HQ. Senior management demonstrated exceptional leadership and engagement in these critical activities.

BN exhibited an outstanding working relationship with all NSO customers during the uncertainty of a Congressional Continuing Resolution for an unprecedented five months in FY 2003. BN aggressively worked with NSO and the National Laboratories to manage any possible negative impacts due to budget uncertainties. This effort kept the program on target to meet Level I and Level II milestones for such national programs as Subcritical Experiments, Test Readiness, and Pit Certification. BN's overall support to their customers during this period was exemplary.

BN proactively partnered with NSO and the National Laboratories to resolve both technical and budgetary issues. For example, Readiness in Technical Base and Facilities (RTBF) has been underfunded for many years. BN's efforts minimized the impact of the budget shortfall. BN also worked diligently to ensure that essential scientific diagnostic personnel were retained as future resources to support the Presidential Test Readiness mandate (24-36 months). Furthermore, BN successfully partnered with LANL, NSO, and Titan PSI (formerly Pulsed Sciences Inc.) to develop a CYGNUS machine for radiographic capability at U1a complex. The first machine was successfully tested at LANL and moved to the NTS U1a complex in August of 2003.

BN provided excellent support to LLNL JASPER safety basis control implementation and operations during the LLNL Management Self-Assessment and Contractor Readiness Assessment. Their efforts in coordination and planning led to the NSO approval of the first special nuclear material experiment at JASPER. BN made it a priority to ensure all pre-start findings from the reviews were effectively closed, and assisted LLNL in closure of their actions.

Enhance Working Relationships- Areas Requiring Improvement
None reported.

Enhance Business Management Systems – Achievements
Throughout the year, BN made considerable effort to reduce the cost of doing business. BN accepted numerous new functions from NSO and ensured that indirect rates would remain constant in order to provide cost stability for NTS customers.

BN completed all action items recommended by the Cost Estimating Joint Task Force. Some of the major changes included strengthening systems for defining and controlling estimate scope as well as improvements to the timeliness of estimate approvals. Most noteworthy of these changes was the development and implementation of the Cost Estimating Issue Resolution system, which identifies, measures, and resolves customer concerns with BN cost estimates. In addition to training BN staff on this new system, NSO was briefed on the benefits of the new system to its customers.

BN submitted noteworthy cost estimates to remediate beryllium contamination at the North Las Vegas B complex facility. An independent review of the cost estimate found it to be competently prepared, well organized, and presented the work scope in a clearly defined manner. Production rates, labor rates, composition of labor, equipment costs, and remediation protocols were clearly delineated in the detailed backup cost estimates and considered reasonable for the scope and condition of the work.

BN exceeded expectations by effectively pursuing numerous out-sourcing opportunities. This effort was expanded from design-build firms to all firms in Nevada. BN contacted 152 construction firms for outsourcing opportunities. BN outsourced $7.9M to these firms of which $6.8M or 87% went to Nevada companies. In addition, BN spent $89M on subcontracts overall in FY 2003 with $25M going to Nevada companies. This represented a significant increase from the $46M spent in FY 2002. These successes are a result of BN efforts to assist neighboring counties in developing contracting skills through a formal mentor-protegé program. BN assisted Nye, Esmeralda and Lincoln counties in developing contracting skills in order to do business under BN requirements. As a result, BN was able to award one subcontract for $305K to a General Use Construction business in Pahrump, Nevada.

BN was awarded the Secretary of Energy Field Management Contractor (FMC) Small Business Diversity Achievement Award for the highest percentage of diversity in its subcontract awards to socio-economic classes of small business concerns. Through BN's continued excellent subcontracting efforts, all socioeconomic goals, which included small business, small disadvantaged business, woman-owned business, Historically Underutilized Business Zone business, and Veteran-owned business, were exceeded.

Enhance Business Management Systems - Areas Requiring Improvement

BN did not meet the expectation of NSO management to provide a plan to identify and demonstrate the specific areas for cost savings. BN did not identify significant "hard dollar" cost reduction initiatives to the NNSA Office of Field Financial Management for validation nor was implementation of these initiatives evident.

Although cost estimation improvements have been made, scope definition of BN cost estimates remain an issue as further identified in the Project Management section of the Comprehensive Incentive narrative.

Other Achievements

Leadership Development

Several key leadership positions were filled during FY 2003 to foster continuous improvement and enhance the planning and execution of many programs. Those key management positions were in site operations, construction, counterterrorism, nuclear operations, national security, facility planning and execution, public outreach, engineering, project management, and laboratory liaison. Over the next year, the key will be to drive project management and safety cultural changes throughout the workforce.

In addition, the corporate leadership training program, Performance Based Leadership and the Table Group leadership development program have been adapted to continue to build a strong leadership team.

Community Involvement

Bechtel Corporate has continued to provide excellent support and numerous volunteers for a wide range of community support. Most significant is the grant from the Bechtel Foundation for the Atomic Testing Museum. Bechtel National also presented UNLV with a grant for the new Science, Engineering, and Technology Research building. Other community support included the United Way, Food Bank Drives, Salvation Army's Angel Tree Program, Adopt-A-Family (Lutheran Social Services), and the DOE Regional Science Bowl (educational program).

MGT03A-02 SELF-ASSESSMENT PROGRAM

Introduction

BN has shown aggressive acquisition of outside expertise to help improve the company's performance. BN also demonstrated progress in developing their internal self-assessment program, albeit slower than expected. With revised company directives, increased expectations for formality, and senior management leadership/commitment, more meaningful and risk-based self-assessments are being performed. BN data entries in caWeb Issues Tracking System indicate BN employees are following their assessment processes. Also, the number of BN organizations inputting data into caWeb indicates a growing acceptance of such management tools to proactively improve their own performance without federal coaxing and direction.

Achievements

BN demonstrated an enhanced commitment to their self-identification of issues through several Request for Contractor Affiliated Sources initiatives. BN obtained the services of affiliated organizations to assist in training Six Sigma Yellow Belt candidates; educate employees in Project and Value Engineering; assess the NTS Waste Examination Facility HEPA filtration issue; perform external design

reviews of U1h and the Yucca Lake Runway facility; evaluate the BN infrastructure organization and capabilities; and assist the Atlas Relocation Project team and Encapco Soil Stabilization work. To evaluate BN management systems, Bechtel Corporation was utilized to assess BN Standard Work Processes. This outside expertise brought new perspective to the BN management team, validated selected BN work processes and products, and identified numerous opportunities for improvement.

BN improved their management assessment company directive and independent assessment organizational procedures. These management systems define assessment performance requirements including review criteria, review processes, and documentation forms. NSO received an assessment schedule from BN in October 2002, which justified the selection of 12 assessments (four of which were independent assessments) from a risk-based perspective. NSO evaluated these completed BN assessments and determined that the performance documents are being effectively implemented. This has resulted in improved quality and formality of BN assessments from a risk-based perspective and provided NSO confidence in the BN expanding self-assessment program.

BN successfully populated the caWeb Issues Tracking System with new and existing assessment data by December 20, 2002, which implements a collaborative approach to issue tracking unique in the Department. In operating the caWeb system, BN ensured that requests for assistance were promptly addressed by the BN Help Desk and provided excellent system maintenance. BN also conducted a self-assessment of caWeb effectiveness in April 2003. The data provided by that assessment and a second self-assessment submitted by BN in June 2003 provided NSO with valuable information on opportunities for improvement in site implementation of the system.

A review of the caWeb data indicates a growing culture and commitment to management and independent self-assessments. BN conducted nearly 700 such assessments with most occurring in the second half of the year as the revised company performance documents were implemented. A review of the data indicated contributions from most BN organizations. It was noted, however, that most of these self-assessments were document reviews only. The process warrants improved focus on defined risk controls. Overall, this is a move in the right direction and indicative of BN's willingness to meet NNSA's expectations for an expanded self-assessment program.

Areas Requiring Improvement

Some significant areas requiring improvement were identified associated with of the Contractor Assurance Program. In particular, BN did not provide a Self-Assessment Process Description until September 2003, nearly a year late. This document was identified as an incentive target to more effectively guide the implementation of a self-assessment program that would meet the DOE/EH-2 expectations for a certified contractor self-assessment program. Providing this documentation in the time frame requested could have placed NSO/BN at the head of the NNSA Line Oversight/Contractor Assurance System initiative. Furthermore, in preparing for a September joint NSO/BN briefing to NNSA/HQ on the Line Oversight/Contractor Assurance System, BN's draft input to NSO on their approach was delayed, causing a negative impact on NSO's ability to efficiently complete our briefing. It is noted, however, that the end result is an effective strategy that was recognized favorably by NNSA/HQ.

In the first half of FY 2003, BN did not provide any requested specific tracking/trending reports. During the second half of FY 2003, BN provided both quarterly reports on time. The lack of reports in the early

part of the year resulted in NSO staff conducting reviews that were not efficiently focused. Additionally, BN quarterly reports provide only limited discussion on level 1 and 2 corrective action closure activities without reference to explanations or paths forward for overdue action items in accordance with the performance target. Without the requested information, NSO staff was unable to closely monitor BN corrective actions to ensure the results met NSO expectations.

III. MISSION

MIS03A-14 ENVIRONMENTAL MANAGEMENT ACTIVITIES

Introduction

BN had several noteworthy accomplishments in the Environmental Management program as described below, however incidents involving non-compliance with work control procedures and conduct of operations detracted from the BN overall performance.

Environmental Management Information System (EMIS) – Achievements

BN supported the EMIS development by continuing to enter information into the database during the course of the year. This included updated project lifecycle baselines, scopes of work, resource loaded schedules, and basis of estimate detail. All principal milestones were met by the end of the fiscal year with the exception of the TRU Project Lifecycle Baseline, for which NNSA specifically granted an extension until October.

Advanced Monitoring Systems Initiative (AMSI) - Achievements

BN completed three of the four technology demonstrations planned for this fiscal year. The failure to deploy the fourth planned demonstration was beyond BN control. BN did an admirable job in completing the work on the three demonstrations. During the course of the year, BN also did extensive work on developing the infrastructure and support mechanisms needed for the AMSI project to successfully continue, with the end result being that it is well positioned for future years activity.

Borehole Management – Achievements

BN exceeded expectations in the borehole management project by completing surface preparation of 117 holes for closure (100 boreholes were targeted).

Disposal of Low-Level Waste (LLW) at the NTS – Achievements

BN exceeded expectations and disposed of the largest volume of LLW (3,237,670 ft^3) at the NTS since operations began in 1974. While disposing of the record volume, BN continued to operate in an effective and efficient manner and did not delay any LLW generator nor was any waste rejected, despite maintenance/operational issues with their equipment. At the same time, the Area 5 Radioactive Waste Management Complex (RWMC) and the Area 3 Radioactive Waste Management Site (RWMS) were performing activities required to obtain their Hazard Category 2, Non-Reactor, Nuclear Facility Operations Approval. The approvals required BN to complete a management self-assessment for each site and demonstrate readiness. BN successfully completed the assessments while maintaining disposal operations.

Disposal of Low-Level Waste (LLW) at the NTS - Areas Requiring Improvement
LLW equipment downtime and reliability have caused some concerns. In September 2003 an equipment Operator operating a front-end loader hit and ripped open a LLW waste package in Area 5 RWMC. Critique of this incident indicated that much of the BN LLW Operations equipment is either non-operational, undergoing preventive maintenance, or is being used with non-critical mechanical systems in need of repair, e.g., a forklift was used with an inoperable A/C unit.

Other – Achievements
BN was highly successful in performing tasks and activities in support of DOE's Marshall Islands program. BN quality of services to, and coordination with, the other Marshall Islands contractors was outstanding. While executing a complex degree of logistical functions and mission support roles, BN managed to address and make improvements in key areas such as training and increased responsibilities for host-country nationals, workplace safety, and environmental/radiological protection.

BN completed 240 days (110,100 hrs) without a lost-time accident while providing characterization support at 54 Corrective Action Sites (CASs) and performing remediation work at 98 CASs within the Industrial Sites Project. BN's Industrial Sites managers were proactive in reporting incidents and consistently demonstrated a commitment to safety.

BN successfully completed closure of the RMAD facility using innovative waste management techniques resulting in a $250,000 cost savings.

In the RWAP program, BN approved three new Low-Level Waste Generators and developed and completed the complex wide NTS/Hanford standardized waste profile review process. This standardized waste profile process will result in future financial and time savings to potential waste generators.

Other – Areas Requiring Improvement
BN use of root cause analysis did not meet NSO expectations. An analysis of an unauthorized excavation incident did not initially address root cause or preventive measures and did not address Integrated Safety Management System (ISMS) principles.

There were numerous health and safety and environmental/regulatory related concerns in the BN Environmental Management Program this past year. There were several worker safety incidents (including one lost time accident) in the Underground Test Area program. Also, there were two incidents of unauthorized excavations, two PAAA reportable non-compliant incidents (one involving improper storage of equipment and one involving material inventory), and an unauthorized entry into a contamination area at RMAD. Although there were no fines or enforcement actions, these issues require a cultural change at the BN working level to implement the principals of ISM with particular emphasis on work control.

BN's inadequate cooperation with EM Headquarters and inadequate coordination with the TRU characterization vendors must be improved to accomplish mission activities. In the first instance, NSO had to overcome a negative impact created by BN personnel absent from a key EM HQ sponsored meeting. As a result, additional NSO resources were required to gain approval of a major safety basis

document (Revision to the Area 5 Documented Safety Analysis (DSA) and Technical Safety Analysis). Since the time of these events, BN has been proactive and has supported NSO's interactions with HQ. In the second instance, BN's inadequate coordination/prioritization resulted in short term impacts to the Central Characterization Project (WIPP) vendors to accomplish their work. The requirement for BN to provide support to the vendors was not met because BN personnel were assigned to other projects resulting in the vendors being idle until the necessary BN resources became available.

MIS03A-15 – ENHANCE NATIONAL SECURITY CAPABILITIES

Introduction

BN continued to provide exceptional support and results to the National Security Program. BN exceeded expectations in several critical mission areas and was actively engaged to ensure customer requirements were met.

Hard Target Defeat/Counter-Proliferation Program – Achievements

BN was extremely responsive to customer needs by providing site preparation and construction support to the Defense Threat Reduction Agency (DTRA) Hard Target Defeat/Counter-Proliferation Program. BN also provided clean-up and some test bed reconstitution (as required) and developed an engineering and construction solution to a portal reuse issue that allowed DTRA to extend the life of the U16b.03 portal. The DTRA program included many diverse and complex activities that ranged from limited surface chemical and toxic substance spills to high altitude airdrops of live munitions into hardened tunnel complexes.

Hard Target Defeat/Counter-Proliferation Program – Areas Requiring Improvement

Nothing reported.

Counterintelligence - Achievements

Overall, BN provided excellent support in the Counterintelligence (CI) activities. The BN CI Office provides weekly threat briefings to managers responsible for National Security Response and deployments with positive verbal feedback regarding this initiative. The comprehensive CI Support Plan and project-specific attachment were successfully activated and address terrorism and intelligence collection concerns related to the countries visited by BN personnel.

The new Cyber Technical Expert (TE) conducted research and gathered information for the purpose of adding a computer annex to the NSO CI Program Threat Assessment that will allow for better prioritization and direction of CI resources to protect BN resources. The TE also completed the first exhaustive Cyber Investigative Plan in DOE/NNSA CI, which was briefed at a recent Cyber Conference, to be benchmarked by other offices.

The BN CI Office supported the Counterintelligence Evaluations Program (CIEP) by conducting 16 personnel security file reviews in FY 2003. All file reviews were completed within one week of notification, well above the 30-day suspense. The personnel file reviews enabled CIEP to complete its counterintelligence evaluations for personnel assigned to High Risk positions.

Counterintelligence – Areas Requiring Improvement

Nothing reported.

National Security Response - Achievements

Since September 11, 2001, the response to national emergencies has had a high priority in the U.S. Government. BN, through the NSO, has played a key role in providing assets for the response to terrorist activities involving nuclear material. Their support to NSO and to NNSA/HQ exceeded expectations and made an impact on the overall safety of our nation. BN responded to deployments and exercises in the face of fiscal restraints and the pull of other requirements.

BN has effectively met this metric through several critical activities such as the deployment in field operations of 482 man-days in support of the Department of Homeland Security (DHS). BN participated in numerous emergency response activities/deployments without a lost time accident and provided Safety Briefings prior to all deployments. BN has formalized a process for lessons learned documented from After-Action Reports. The NSO received positive feedback on the national DHS exercise, Topoff II from Headquarters and participating interagencies as a result of deployment activities by BN.

Safety was the number one consideration through planning, preparation, and operational phases of every national security response. BN provided outstanding weekly, monthly, and quarterly reporting as well as other less formal communications as needed. BN ensured work control measures were used in daily activities and no major accidents or incidents occurred during response activities.

BN met all response timelines for deployments set by NSO and updated the formal documentation needed to ensure the readiness of the national assets. BN maintained monthly deployment rosters and tested the "Dialogics" call out system weekly for all deployment teams. BN also met an unplanned requirement to significantly accelerate the training and deployment of search instruments to the Radiological Assistance Program's eight regions across the country.

BN adapted to a wide variety of mission parameters. They have continued to increase the number of trained responders and developed formal consequence management training courses. BN continued to develop radiological equipment technical integration to stay on the leading edge of technology. In addition, they adapted quickly to changes in operations for the Aerial Measuring System /Federal Radiological Monitoring and Assessment Center in the Topoff II exercise.

National Security Response – Areas Requiring Improvement

None reported.

Nevada Test Site (NTS) Disposition - Achievements

During the development stage of the Disposition Program at the NTS, BN has shown leadership in developing the G-Tunnel facilities and shown a readiness to step in to accept responsibility for managing these facilities. BN capabilities have materially helped the Disposition Program in its developmental struggles of the past year.

BN and subcontractor personnel have completed the 33 most critical NTS Disposition Program documents/procedures including the 60% draft of the U12g Documented Safety Analysis, the G-Tunnel fire hazard analysis and many U12g authorization basis documents. In addition to completing the documentation required to ensure procedural control over NTS disposition activities, BN personnel have maintained the G-Tunnel facility in a readiness status and have demonstrated that capability by

successfully participating in numerous drills and one large-scale training activity that satisfactorily exercised the facility and the NTS infrastructure.

Nevada Test Site (NTS) Disposition – Areas Requiring Improvement
None reported.

IV. OPERATIONS

OPS03A-01 COMPREHENSIVE INCENTIVE

Introduction
BN's performance in the areas covered by this PO has been mixed. BN has demonstrated several improvements in their project management practices and processes during the evaluation period. However, implementation has been inconsistent amongst the various mission lines, which is of concern to the NSO. In addition, BN met expectations in Business Management and Occurrence Reporting but did not meet expectations overall in safe and secure operations.

Project Management – Achievements
BN provided outstanding customer focus and success as it relates to project management, across the National Security Program. Examples of BN exemplary performance include management of Project 400, the execution of the PIANO subcritical experiment, execution of Jasper's first special nuclear material experiment, the acceptance and execution of the G-tunnel Disposition Project requirements, BN's project management support for "Z" Pinch Certification, DARHT, NIF, as well as supporting the upcoming subcritical experiments ARMANDO and UNICORN. These are all examples where BN met and/or exceeded customer expectations in managing cost, scope, and schedule commitments under very diverse and dynamic conditions.

BN also provided notable customer focus and success, in the area of Infrastructure Management. For example, management of the Electrical Systems Bus Upgrades Project was recognized by NNSA/HQ for its exemplary cost control. In addition, there were several notable successes under the Facilities and Infrastructure Recapitalization Program (FIRP). First and foremost was BN management of the Facility Disposition Project. This project was recognized by NNSA/HQ as being the most cost effective (in terms of dollars spent per square foot of facility demolished) across the complex. BN was able to complete several FIRP projects under budget, resulting in $2.7M of cost savings. This money was redirected to other FIRP projects, allowing the program to begin work that was scheduled for FY 2004.

Areas Requiring Improvement
While BN demonstrated some success in the area of project management, there were several areas of concern identified during the evaluation period. Most notable were problems related to scope definition, cost estimating, execution, and project control. BN has developed and/or revised several company directives to help address these issues, but they have not been implemented long enough to determine if they will sufficiently address these concerns.

In the area of scope definition and cost estimating, there were several examples where NSO expectations were not met. These include estimates associated with DTRA projects, the Immune Building Project, the Mars Launch Project, the NLV B-1 Demolition Project, the RSL Rewiring Project, and the USAF Rock Crusher Transfer. Specific problems associated with these examples included poor scope

definition, insufficient review by safety subject matter experts, procedural issues, and untimely delivery of products.

In the area of execution and control, there are several examples of poor project management and control practices being utilized by BN that resulted in NSO expectations not being met and often resulted in significant cost and/or schedule overruns. Notable examples include inadequate resource loading, non-adherence to resource loaded schedules, and overall cost control in the ATLAS project and schedule control in Device Assembly Facility (DAF) FIRP projects. Additionally, BN continues to lag the complex in execution of its FIRP projects. Continued inability to complete FIRP projects within a two-year period will jeopardize future FIRP funding. In addition to execution issues, there have also been some significant examples of quality assurance/quality control issues related to project execution. Quality process issues in the inspection of JASPER Primary Target Chamber (PTC's) caused reinspection of 6 PTC's and rework of one flange with some cost impact to LLNL. Quality of vendor services and products and the need to rework these products caused increase in cost and schedule delays in the U1h upgrade project.

Business Management

Human Capital Management - Achievements:

BN met the expectation to ensure continuity of "key personnel" during this performance period.

BN effectively developed and submitted the Human Capital Management Plan within the agreed upon timeframe. BN delivered a quality plan that addressed NSO expectations regarding staffing mix and workforce utilization.

BN increased female and minority hires, which included 18 NSO employees affected by elimination of the Nevada Operations Office. BN's female workforce population has increased by 1.2%, and their minority workforce has increased by 1%.

Human Capital Management – Areas Requiring Improvement:

BN was unsuccessful in improving their supervisory to employee ratio. As of September 2003, the supervisor to employee ratio was 1 to 11.5 as compared to the ratio of 1 to 12.28 in September 2002.

Financial Management - Achievements:

BN's financial stewardship remains high with no significant audit or oversight financial findings.

BN shows continual improvement with the accuracy of vendor payments. The DOE monitors the accuracy of Integrated Contractor payments to vendors through a quarterly Erroneous Payment Report. BN continues to show a high degree of accuracy with its payments and for FY 2003 reported a 99.996 percent accuracy rate for the payment metrics being measured.

BN continues to provide timely and high quality financial data to NSO for month-end and year-end closings. The accuracy and timeliness of the data significantly reduces NSO time and effort in the closing process.

BN continues to show improvement in its ratio of direct spending to total spending. The indirect cost to total cost ratio reduced from 45.2% in FY 2002 to 42.4% in FY 2003.

BN completed the orderly transition of the WFO accounts receivable process from NSO to BN in a timely and effective manner with no impact on the WFO customers.

BN reduced its reportable uncosted balances from 11 in FY 2002 to seven in FY 2003. The primary driver for all but one of the seven reportable FY 2003 uncosted balances was the result of late receipt of budget authority.

Financial Management – Areas Requiring Improvement:
While BN continues to bring the uncosted thresholds in line with the Departmental guidelines, and FY 2003 is an improvement over FY 2002, BN still needs to improve overall performance in this area.

Business Efficiencies - Achievements:
BN was successful in the cost effective implementation of information technology initiatives and applications. The ORACLE 11.5.8 upgrade was completed supporting all major applications within the BN enterprise. Sunflower Assets was upgraded to the latest version in support of the property system. Furthermore, the planning, coordination and handling of the Telecommunications Contract recompete has been professional and is expected to result in substantial operating efficiencies and cost savings.

BN ensured the availability of critical communication systems during the performance of routine maintenance activities by prioritizing facilities where power disruptions would cause problems for the enterprise and by making as-built drawings of the power distributions single line diagrams. BN documented and identified areas where routine maintenance would require the disabling of power to these facilities. In addition, BN is labeling all potential disconnect areas with appropriate information to allow notification to parties that can mitigate issues arising from power outages.

BN completed the timely and effective upgrade of the telephone switch in a planned, professional manner with no negative customer impacts. BN exceeded expectations by completing three additional upgrades (Tonopah Test Range, Special Technologies Laboratory, and DAF switches) on schedule and under budget.

BN completed all business systems deliverables under budget, as planned in the Business Application Modernization Plan. BN was recognized within the NNSA Complex and by software vendors for best practices. Of particular note was the implementation and upgrades of the Oracle financial suite and PeopleSoft HR/Payroll suite. BN was able to leverage these systems to support key mission requirements including WFO account billings, Time and Labor, eRecruit, and Plateau Learning Management System.

Business Efficiencies – Area Requiring Improvement:
None Reported.

Safe and Secure Operations - Achievements:
BN made some improvements in the safety of their operations. The contractor's FY 2003 Total Recordable Case (TRC) rate is the lowest since the start of the contract. This is a noteworthy statistic, however, numerous accidents, incidents, and near misses are indicative of a safety culture that has not matured and may not be able to maintain this low TRC rate.

BN has demonstrated improved depth and breadth of ES&H assessments. BN allocated the necessary resources to develop detailed self-assessment plans that were very effective in identifying many process issues. These self-assessment plans were of a sufficient detail to obviate the need for further federal assessments in these areas. This approach now permits federal collaboration to monitor the conduct of these periodic self-assessments, the written results, and corrective actions leading to long-term improvement. Thus, fewer federal oversight resources will be required in the future if BN continues to expand such an effective program.

BN was responsive to the release of the "Investigation of Beryllium Exposure Cases Discovered at the North Las Vegas Facility" report. The contractor was proactive in identifying all potential employee concerns that could impact safety, health and morale. BN developed and implemented work control improvements, opened a laboratory to characterize NTS facilities for toxic metals, developed a web-site with comprehensive beryllium related information, and conducted meetings with federal and contractor employees to allay concerns. Such responsiveness contributed to the effective management of this issue, ,which otherwise could have had a significant impact on the NSO mission.

BN was proactive in implementing the new underground operations safety and health standards enacted by NV Order 440.X and incorporated this requirement into the Work Smart Standards. The contractor conducted a gap analysis that resulted in revising or adding new directives and procedures to fully implement the new standards, and developed a new, more rigorous, program to comply with the new requirements for training underground workers. BN met with all impacted stakeholders and effectively communicated how the new training would be structured to meet both the requirements and stakeholder needs. This communication was particularly noteworthy because other NTS users were concerned over potential cost impacts to their programs resulting from these new requirements.

Safe and Secure Operations - Areas Requiring Improvement:

BN continues to experience challenges in their implementation of Integrated Safety Management (ISM). FY 2003 reports of BN related accidents, near misses, or incidents indicate continued problems in risk identification, risk control development, and employee implementation of controls. BN is making aggressive improvement to self-identify and self-correct issues. However, more effort is needed to improve operational cultural issues.

BN operational performance was weakened by radiological and environmental incidents this year. BN received a significant non-compliance with a permit condition letter from the State of Nevada for exceeding the NLV wastewater discharge permit. Several other potential Notices of Violations include: the unintentional release of approximately 1100 gallons of hydrocarbon fuel from the Hazmat Spill Center, which was not reported for nearly a week; non-permitted discharge of oil into the Mercury Sewage Lagoon; and a non-permitted discharge of waste into the Area12 sewage lagoon.

In early FY 2003, the HQ Office of PAAA Enforcement evaluated BN and identified numerous potential PAAA violations. HQ subsequently issued an Enforcement Letter for these nuclear safety issues. This action was just short of a PAAA Notice of Violation. It is noted, however, that most of these incidents occurred in the first half of FY 2003 and that BN performance in this area did improve in the second half of FY 2003.

NSO is depending on BN to enhance their self-assessment program to include areas traditionally assessed by federal personnel. 13 ES&H functional self-assessments (i.e., radiation protection, industrial hygiene, fire protection, etc.) were identified in a performance target for this measure. NSO subsequently clarified the focus of these 13 functional self-assessments during NSO/BN monthly partnership meetings conducted in early FY 2003. The 13 functional self-assessments were to be derived from NSO/ESHD's functional responsibility areas identified in the NV Manual 111.XB, *Functions, Responsibilities and Authorities Manual.* BN completed only four of these functional self-assessments. It is noted that these four self-assessments were excellent.

The near miss associated with the MARXT HV Step Signal Generator indicates that there are possible systemic issues associated with the implementation of BN company directives and initiatives for proper hazard identification and mitigation, inclusion of appropriate subject matter experts in the development of project plans and work control packages, and safety oversight in general. Adequate determination of the root-cause for this incident is necessary to ensure that the corrective actions instituted will correct the actual problem(s) and prevent recurrence, rather than only addressing the symptoms. Furthermore, failure to identify key risks and associated design/engineering/management controls will inhibit the development and implementation of an effective self-assessment program.

ISSM – Achievements:
BN effectively addressed the eight performance targets identified in this measure for the implementation of Integrated Safeguards and Security Management (ISSM) program. Each of the criteria was completed ahead of schedule and in a cost-effective manner. BN efforts on this highly visible scope of work reflected positively on the NSO throughout the NNSA Complex.

ISSM – Areas Requiring Improvement:
None reported.

Facility Efficiencies – Achievements:
BN has made significant efforts to improve the accountability of maintenance data. BN reorganized their management structure to address concerns over infrastructure and maintenance accountability and established a finding in caWeb to keep track of this issue. The contractor addressed the issue by centralizing maintenance activities within the Assistant General Manager for NTS Operations. These actions will ensure the appropriate level of management attention to infrastructure issues.

Facility Efficiencies – Areas Requiring Improvement:
The Annual Maintenance Plan (AMP) was delivered late and the content was inadequate and unusable. The Plan was internally inconsistent and contained data that was found to be incorrect. BN was provided a 30-day extension to correct the product; however, the new deliverable did not integrate direct and indirect maintenance and failed to address a configuration management process to ensure the integrity of physical assets. Additionally, BN did not meet the NSO requirement for reporting direct funded maintenance due to inadequate financial accounting practices. Changes will be required in how BN integrates and tracks maintenance data to allow for the proper categorization and tracking of direct and indirect funded maintenance activities. Finally, the AMP did not address the condition of all infrastructure in FY 2003 as required.

Although BN scheduled, coordinated, and performed preventive, predictive, and corrective maintenance throughout the performance period, the low preventive maintenance completion rate did not support the goals of reducing the deferred maintenance backlog in time to meet the FY 2005 corporate goal agreed to at the July 2002 Deferred Maintenance summit. The preventive maintenance completion rate was approximately 70%, which is below the Energy Facilities Contractor's Owner Group completion rate of 87%. Furthermore, the preventive maintenance completion rate trended downward throughout the year.

Occurrence Reporting System - Achievements

The BN Occurrence Reporting and Processing System (ORPS) Manager has achieved a greater level of control and consistency for entering occurrences into the ORPS system within 45 days of the occurrence being categorized. No extensions were required for completion of corrective actions or reporting requirements. BN has developed a formalized process for informing NSO of near misses and other safety related issues identified in facilities at North Las Vegas, NTS, and off-site facilities. The BN ORPS Manager developed and delivered a quality Quarterly Report on time. Furthermore, BN proactively initiated training of facility managers, senior managers, and technical personnel responsible for categorizing events under ORPS, even before the new directive was effective and implemented in their Work Smart Standards.

Occurrence Reporting System – Areas Requiring Improvement

None reported.

OPS03A-05 NUCLEAR OPERATIONS SAFETY MANAGEMENT READINESS

Introduction

BN made significant improvements in the establishment of a nuclear operations infrastructure. A Nuclear Operations Safety Management Program Plan was developed and implemented, an improved Facility Readiness Review Process with Start-up Notification Reporting is now in place, an Unreviewed Safety Question (USQ) process is now functioning, and a 10 CFR 830 – Subpart A compliant QA Plan has been provided to NSO.

Facility Safety Basis/Technical Safety Requirements Program – Achievements

BN developed a Nuclear Operations Safety Management Program with supporting BN site wide procedures that meets the requirements of 10 CFR 830, Subpart B, *Nuclear Safety Management*. A number of company planning and performance documents were also prepared to lay the foundation for this program. BN took the initiative this year to expand the scope of their effort to provide nuclear infrastructure support to national laboratory-operated nuclear facilities. The development of this nuclear infrastructure benefits all NSO nuclear operations, and BN met the criteria for substantially exceeding expected levels in this area.

Facility Safety Basis/Technical Safety Requirements Program – Areas Requiring Improvement

BN has not completely implemented DOE Order 5480.20A, Chg 1, *Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities*. These training weaknesses were identified during the Area 3 and Area 5 Operational Readiness Reviews (ORRs). Based on the results of the ORRs for Area 3 and Area 5, there is still room for improvement in the safety management program infrastructure areas of nuclear facility training and qualification. Although there has been good progress toward instilling a nuclear safety culture, there is a need for continued improvement, particularly in the

area of maintenance and construction. This has been highlighted by several conduct of operations incidents in this area, indicating a need for additional focus on procedure development and implementation. Attention is needed to avoid future TSR violations similar to the ones that occurred this year with unvented drums and combustible zone restrictions.

Facility Readiness Review Program – Achievements

BN improved their Facility Readiness Review Process to ensure it meets the requirements of DOE Order 425.1B. The BN Readiness Review Program was one of the strengths of the company's overall performance. Readiness review program documents were published, and the program showed continuous improvement through the use of lessons learned from each Contractor Operational Readiness Review (CORR) and feedback received from each subsequent NNSA ORR. The CORR team leaders managed both the process and the conduct of the readiness reviews in an effective and efficient manner and met scheduled milestones. Both NNSA ORR write-ups indicated the CORRs were performed successfully, clearly identified problems, and correctly categorized findings. The CORRs were conducted with required independence (through use of outside contractors), rigor and formality, and the attitude of the CORR team members was professional.

BN developed and implemented a satisfactory Startup Notification Report (SNR) process for nuclear operations at the NTS that meets the DOE requirements. An effective SNR process was developed and included in the overall BN revised Readiness Review Process. Quarterly updates of high quality were submitted on time. The SNR process has been a driving force in early identification of impending readiness review requirements and has ensured the proper planning for upcoming reviews.

BN developed and implemented a qualification and training process for the Facility Readiness Review Program for team leaders and team members. The DOE-approved ORR course was presented to BN team leaders, potential team leaders, and over 30 potential team members on August 26, 2003. The BN readiness review procedures were modified to address the qualification requirements for selected team leaders and team members.

Facility Readiness Review Program – Areas Requiring Improvement

None reported.

Unreviewed Safety Question Program – Achievements

The BN Site Wide USQ Program has been further developed and their USQ Company Directive updated. The BN USQ program has been effectively implemented as validated by the NNSA Area 5 ORR conducted in July 2003. Thirty people have been trained and qualified.

Unreviewed Safety Question Program – Areas Requiring Improvement

None reported.

Quality Assurance Program – Achievements

BN developed a QA Plan that meets the requirements of 10 CFR 830, Subpart A, that was provided to NSO on time. The NSO, in collaboration with BN, performed a review of both the NSO and BN programs focusing on activities that NSO line managers identified as most important from a risk perspective or as high profile issues within NNSA. BN support for this review was helpful in determining the areas of concern in the overall operations of the areas reviewed. BN has been very

supportive in ensuring DNFSB and NNSA QA implementation action plan items are addressed and implemented at NSO.

Quality Assurance Program – Areas Requiring Improvement
None reported.

Other – Achievements
BN effectively implemented the Nuclear Operations Implementation Plan as evidenced in their nuclear safety performance at Area 3 and 5. The Area 5 DSA was implemented and validated by an NNSA ORR that resulted in no pre-start findings, and action plans for the post start findings were approved. The Area 3 DSA was implemented and validated by an NNSA ORR that also resulted in no pre-start findings. The process used to implement the Area 5 DSA involved continuous improvement and the use of compensatory measures so the intermediate steps of Management Self Assessment and CORR could be completed. Company level safety management programs were in place for the NNSA ORR and were validated during the ORR. The lessons learned from the Area 5 DSA implementation were used to accelerate the Area 3 DSA implementation and readiness review process.

Other – Areas Requiring Improvement
None reported.